



# Musgrove

Petroleum Geology  
212 Main Street, Claflin KS

## NOTES

Company: Blueridge Petroleum, Corp

Lease: Lanning #1-10

Field: Norman

Location: W/2-NW-NE-NE (330' FNL & 1090' FEL)

Sec:10 Twsp:4S Rge:32W

County: Rawlins State: Kansas

KB: 2958' GL: 2953'

Contractor: L.D. Drilling Inc. (Rig #1)

Spud:12/14/2019 Comp:12/22/2019

RTD: 4180' LTD: 4181'

Mud Up: 3300' Type Mud: Chemical

Samples Saved From: 3500' to RTD

Drilling Time Kept From: 3500' to RTD

Samples Examined From: 3500' to RTD

Geological Supervision from: 3600' to RTD

Geologist on Well: JIM MUSGROVE (3500- 4020) Wyatt Urban (4020-RTD)

Surface Casing: 8 5/8"@ 261'

Electronic Surveys: Logged by ELI WIRELINE SERVICES, ,DIL/BHCS, CNL/CDL, MEL



### DRILL STEM TEST REPORT

Blue Ridge Petroleum Corp  
10-4s-32w Rawlins, KS  
Lanning #1-10  
Job Ticket: 65644 DST#: 2  
Edmond OK 73003  
Test Start: 2019.12.20 @ 11:57:00  
ATTN: James Musgrove

#### GENERAL INFORMATION:

Formation: **Lansing C - D**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 14:05:00  
Time Test Ended: 18:30:39  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Shawn Wheelbarger  
Unit No: 76  
Interval: **3931.00 ft (KB) To 3970.00 ft (KB) (TVD)**  
Total Depth: 3970.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inchesHole Condition: Fair  
Reference Elevations: 2960.00 ft (KB)  
2955.00 ft (CF)  
KB to GR/CF: 5.00 ft

Serial #: 8355 Outside  
Press@RunDepth: 26.24 psig @ 3932.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2019.12.20 End Date: 2019.12.20 Last Calib.: 2019.12.20  
Start Time: 11:57:01 End Time: 18:30:40 Time On Btm: 2019.12.20 @ 14:04:20  
Time Off Btm: 2019.12.20 @ 16:38:00



### DRILL STEM TEST REPORT

Blue Ridge Petroleum Corp  
10-4s-32w Rawlins, KS  
Lanning #1-10  
Job Ticket: 65643 DST#: 1  
Edmond OK 73003  
Test Start: 2019.12.19 @ 19:52:00  
ATTN: James Musgrove

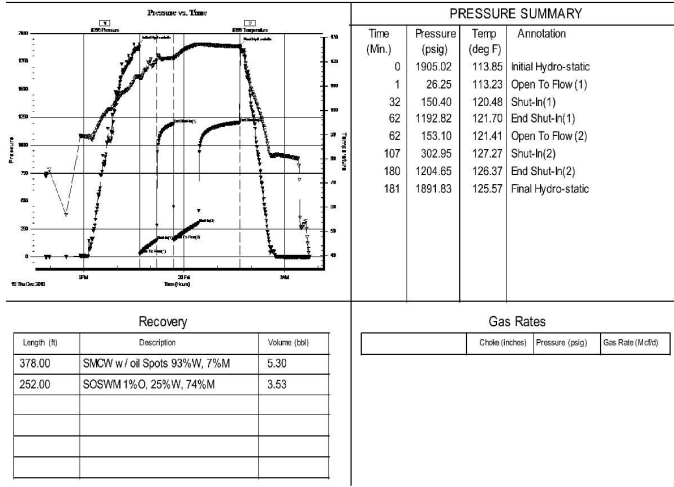
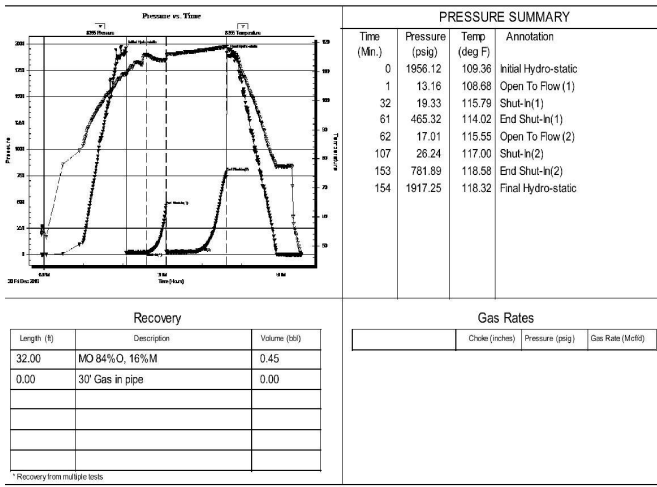
#### GENERAL INFORMATION:

Formation: **Toronto - Lansing A**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 22:40:50  
Time Test Ended: 03:44:39  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Shawn Wheelbarger  
Unit No: 76  
Interval: **3870.00 ft (KB) To 3930.00 ft (KB) (TVD)**  
Total Depth: 3930.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inchesHole Condition: Fair  
Reference Elevations: 2960.00 ft (KB)  
2955.00 ft (CF)  
KB to GR/CF: 5.00 ft

Serial #: 8355 Outside  
Press@RunDepth: 302.95 psig @ 3871.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2019.12.19 End Date: 2019.12.20 Last Calib.: 2019.12.20  
Start Time: 19:52:01 End Time: 03:44:40 Time On Btm: 2019.12.19 @ 22:39:50  
Time Off Btm: 2019.12.20 @ 01:40:39

TEST COMMENT: 30-F-Surface blow @ open built to 2 1/4"  
 30-ISI-No blow back  
 45-FF-Blow built to 1 1/2"  
 45-FSI-No blow

TEST COMMENT: 30-F-2" Blow @ open BOB in 9 min 30 sec built to 26 1/4"  
 30-ISI-No blow back  
 45-FF-BOB in 17 min Blow built to 29 3/4"  
 60-FSI-No blow



**TRILOBITE TESTING, INC.**  
 DRILL STEM TEST REPORT  
 Blue Ridge Petroleum Corp  
 PO Box 30545  
 Edmond OK 73003  
 ATTN: James Musgrove

**10-4s-32w Rawlins, KS**  
**Lanning #1-10**  
 Job Ticket: 65645  
 DST#: 3  
 Test Start: 2019.12.21 @ 05:00:00

**GENERAL INFORMATION:**  
 Formation: LKC\* E - G\*  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 08:02:50  
 Tester: Ryan Nichols  
 Time Test Ended: 10:47:20  
 Unit No: 76  
 Interval: 3966.00 ft (KB) To 4021.00 ft (KB) (TVD)  
 Reference Elevations: 2960.00 ft (KB)  
 Total Depth: 4021.00 ft (KB) (TVD)  
 2955.00 ft (CF)  
 Hole Diameter: 7.88 inches-Hole Condition: Fair  
 KB to GR/CF: 5.00 ft

**Serial #: 8645 Inside**  
 Press@RunDepth: 22.80 psig @ 3967.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.12.21 End Date: 2019.12.21 Last Calib.: 2019.12.21  
 Start Time: 05:00:01 End Time: 10:47:20 Time On Btm: 2019.12.21 @ 08:02:40  
 Time Off Btm: 2019.12.21 @ 09:00:30

TEST COMMENT: 15 F - No blow, flushed tool, no blow  
 30 ISI - No return  
 10 FF - No blow, flushed tool, w weak surface blow

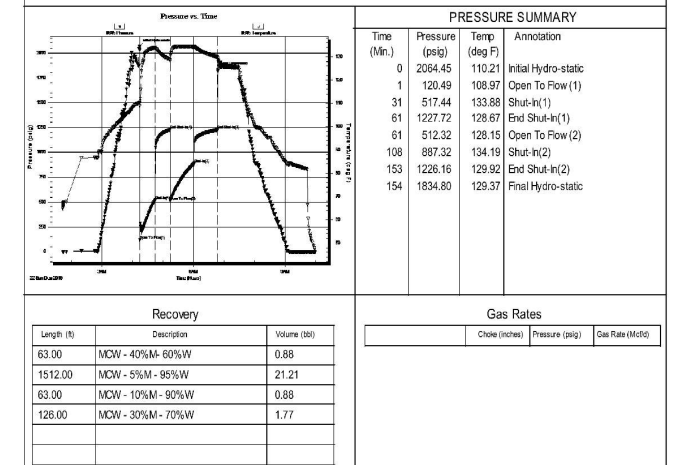
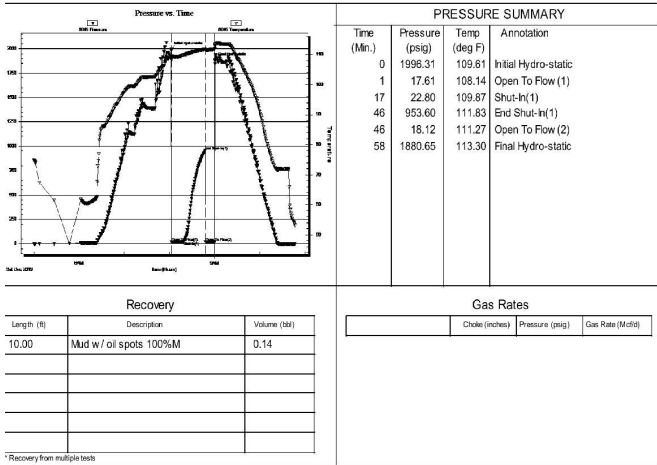
**TRILOBITE TESTING, INC.**  
 DRILL STEM TEST REPORT  
 Blue Ridge Petroleum Corp  
 PO Box 30545  
 Edmond OK 73003  
 ATTN: James Musgrove

**10-4s-32w Rawlins, KS**  
**Lanning #1-10**  
 Job Ticket: 65646  
 DST#: 4  
 Test Start: 2019.12.22 @ 01:43:00

**GENERAL INFORMATION:**  
 Formation: LKC\* H - K\*  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 04:14:20  
 Tester: Ryan Nichols  
 Time Test Ended: 09:59:09  
 Unit No: 76  
 Interval: 4012.00 ft (KB) To 4115.00 ft (KB) (TVD)  
 Reference Elevations: 2960.00 ft (KB)  
 Total Depth: 4115.00 ft (KB) (TVD)  
 2955.00 ft (CF)  
 Hole Diameter: 7.88 inches-Hole Condition: Fair  
 KB to GR/CF: 5.00 ft

**Serial #: 8645 Inside**  
 Press@RunDepth: 887.32 psig @ 4013.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.12.22 End Date: 2019.12.22 Last Calib.: 2019.12.22  
 Start Time: 01:43:01 End Time: 09:59:10 Time On Btm: 2019.12.22 @ 04:14:00  
 Time Off Btm: 2019.12.22 @ 06:47:50

TEST COMMENT: 30 F - BoB @ 3 mins  
 30 ISI - Surface return started @ 5 mins built to 14"  
 45 FF - BoB @ 4 1/2 mins  
 45 FSI - No return



**ROCK TYPES**

Lmst fw<7  
 shale, gry  
 Carbon Sh  
 shale, red  
 Ss

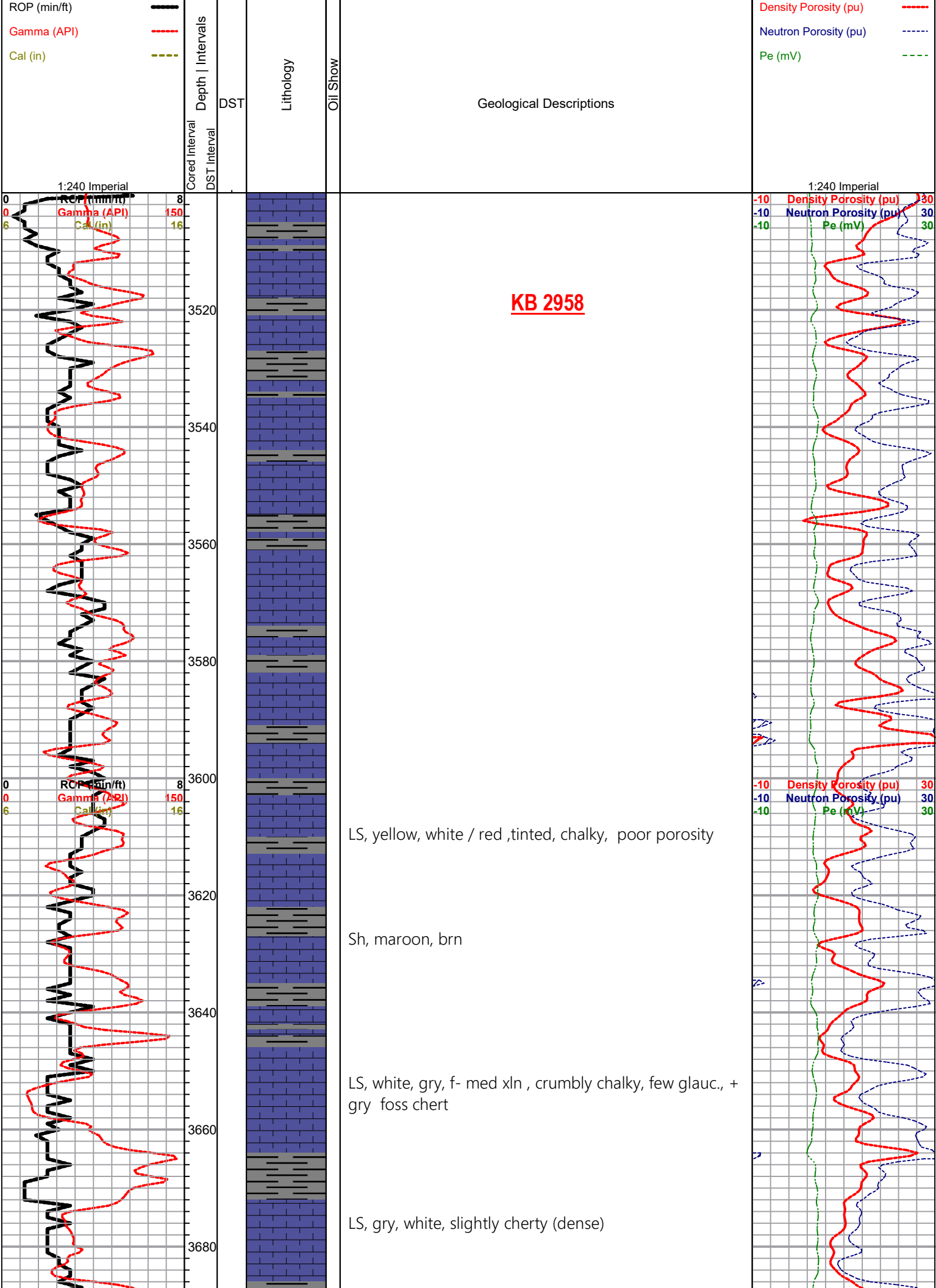
**OTHER SYMBOLS**

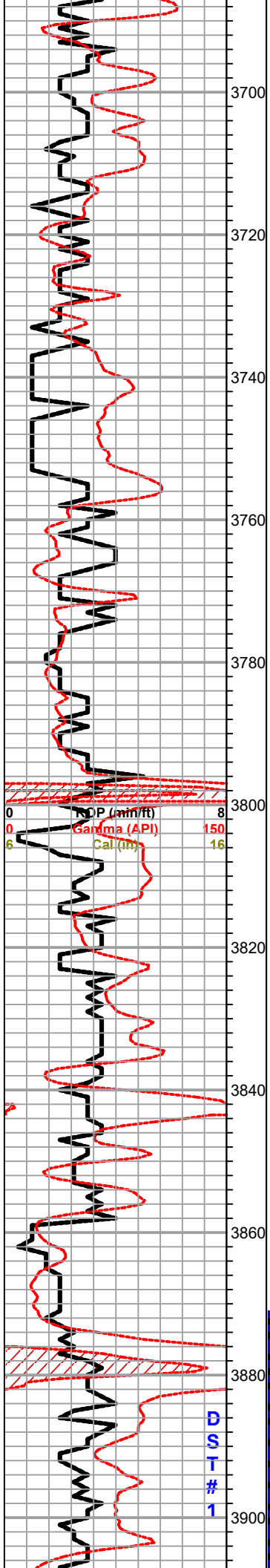
**Oil Show**

- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- D Dead Oil Strn
- Fluorescence
- \* Gas

**DST**

- DST Int
- DST alt
- Core
- tail pipe





LS, gry, crm, highly ool, sl. chalky, no shows,

Tr. red , maroon, tinted LS, & soft shale.

**Topeka 3708.0 (-750.0)**

LS, gry, crm, fxl, few foss, chalky, poor vis. por.,

Sd. white, clr, qtz, vfg, highly cal, poor vis. por, fairly sorted, no shows

LS, tan, gry, foss, poor vis. por, no shows

LS, white, gry, fxl, foss, few ool, poor vis. porosity, white chalk

Tr. black carb

LS, gry, white, sandy, gran., poor vis. porosity, no shows

LS, gry, white, yellow few foss, sl. chalky, no shows

Sh, black carb

LS, gry, wh- yellow, foss, sl. chalky, no shows

LS, crm, white, fxl, foss in pt, dolomitic , no shows

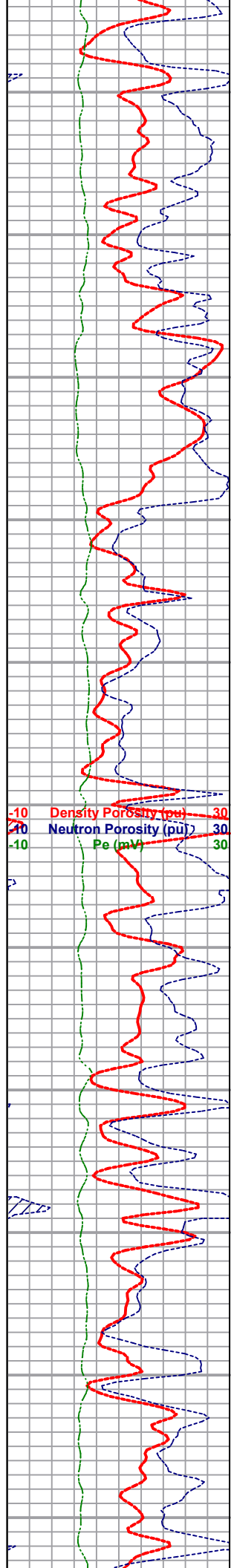
**Heebner 3874.0 (-916.0)**

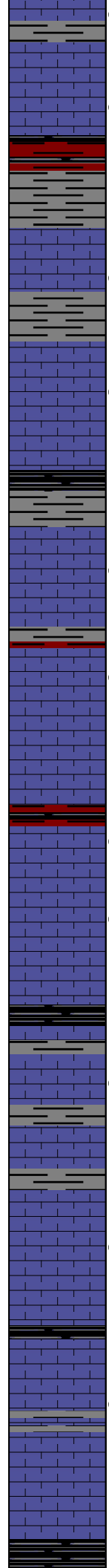
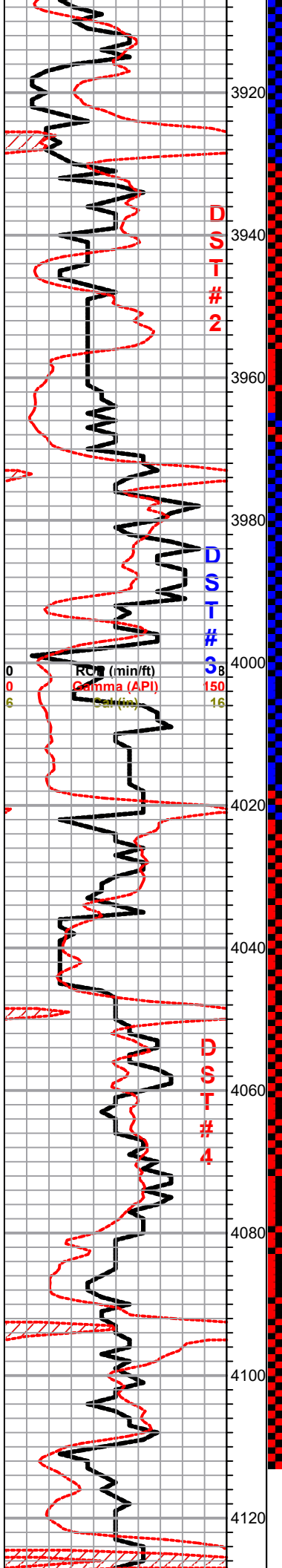
Sh, black carb

Sh, maroon, brick red/ rusty brn silty

**Toronto 3906.0 (-948.0)**

LS, white, gry, crm, fxl, foss, p.p. -- fair vuggy pors., fair





**Lansing 3915.0 (-957.0)**

brn- dk brn stain ; tr. sfo, ft. odor

LS, white, gry, ool/ foss, sl. chalky, scattered porosity, dk brn spttd stain, sfo, ??? odor

Abd., sh, maroon, rusty brn soft

LS, white, crm, fxl, gran., fair p.p. porosity, inxln por., good stain -sat., good sfo, ??? odor

LS, gry, white, chalky --> cherty, poor vis. porosity, blk edge staining. nsfo, no odor

Sh, drk gry, blk carb

LS, gry, white, foss in pt, chalky, gry- brn stain , sfo, no odor

Sh, maroon, rusty brn

LS, gry, f-med xln, scattered XL type por., golden brn stain, tr. sfo, no odor, (sl. grading to fxl, chalky, dense.

Slug maroon soft sh.

LS, crm , fxl, p.p. porosity, spty blk stain , fair sfo, lt. brn ft. odor

LS, white, crm, fxl porosity, chalky luster, v. weak lt. brn spty stain, + LS, white, p.p. type por., lt. spty blk stain , dk brn-blk sfo in crushed samples ??odor ,few vis. gas bubbles.

Black carb Sh

LS, white, cream, foss., poor dev. por., chalky, dense poorly developed vuggy type por., tr. lt. brn spty stain, lt. brn sfo, no odor

LS, tan, fxl, dense, poor vis. por., cherty in pts, no shows

Heavy red wash, soft brick red - dk gry sh,  
Tr. LS, tan, foss, poorly developed p.p. por. chalky in pts, Lt. dk brn flky stain , v. weak spty sfo when crushed, no odor

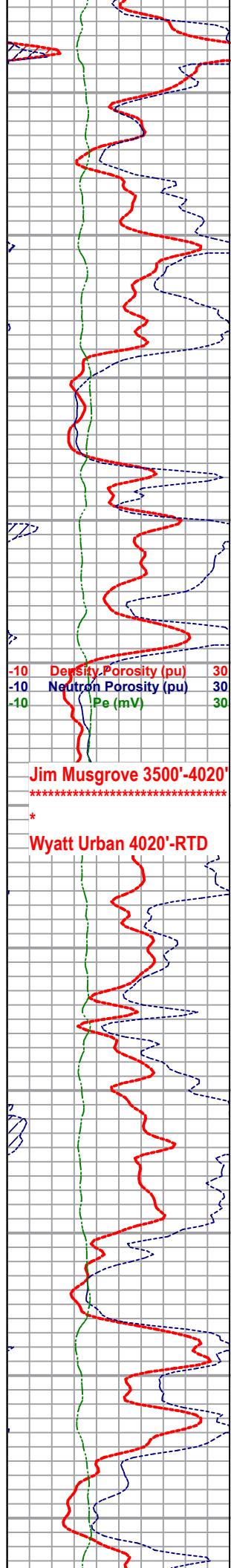
slug dk gry- blk

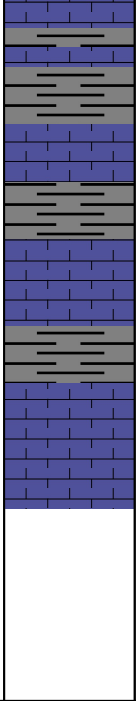
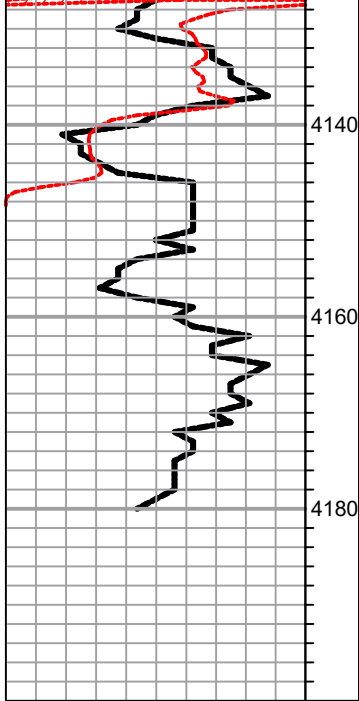
LS, white, fxl, few foss, poor por., lt. gry stain, blk flakey sfo (dead) nsfo, no odor

LS, tan, buff, scattered p.p. por., sl. suc., good inner por. sl. chalky , tr. lt. brn stain, tr. v. weak spotty sfo, no odor , no flur.

LS, tan, brn, poor vis. por., chalky luster, tr blk (flky) stain on few dense cherty samples, no shows, no odor

**BKC 4139.0 (-1181.0)**





Sh, maroon, dk gry , silty / waxy

LS, gry, fxl - dense, poor vis. porosity, nsfo, chalky in parts, no shows,

LS, tan, poorly developed p.p. por., no shows, no odor v. chalky

Sh, maroon, blk soft waxey, +Tr. LS, tan, poorly developed, micro ool/ foss, v. chalky, nsfo, no odor

**Marmaton 4167.0 (-1209.0)**

60" sample - LS, white, micro ool, fair inner ool por., sl. dol., tr. lg. clusters of pyrite in samples, barren. no odor

**RTD 4180.0 (-1222.0)**

**LTD 4181.0 (-1223.0)**

